WHAT IS CLAIMED IS:

1. A vehicle traveling speed pattern estimation device comprising:

traveling information storing means for storing traveling data and traveling environment data as mutually associated data;

candidate traveling speed pattern generating means for generating a candidate traveling speed pattern on the basis of the traveling data; and

estimated traveling speed pattern outputting means for extracting a candidate traveling speed pattern matching current traveling environment data and outputting an estimated traveling speed pattern for a route to be followed from now on.

2. The vehicle traveling speed pattern estimation device according to claim 1, further comprising:

frequent route specifying means for specifying a frequent route on the basis of the traveling data; and

sectionally dividing means for dividing the frequent route into short sections, wherein

the candidate traveling speed pattern generating means generates the candidate traveling speed pattern for each of the short sections, and

the estimated traveling speed pattern outputting means extracts a candidate traveling speed pattern for each of the short sections, and outputs an estimated traveling speed pattern for a frequent route to be followed from now on.

3. The vehicle traveling speed pattern estimation device according to claim 2, wherein

the candidate traveling speed pattern generating means classifies the traveling data for each of the short sections on the basis of an average traveling speed for each of the short sections or a degree of similarity among traveling speed patterns for each of the short sections, and generates a traveling speed pattern representing a set of the classified traveling data for each of the short sections as the candidate traveling speed pattern.

4. The vehicle traveling speed pattern estimation device according to claim 2 or 3, wherein

the estimated traveling speed pattern outputting means extracts traveling data matching current traveling environment data for each of the short sections, extracts a candidate traveling speed pattern representing a set to which a greatest number of the traveling data belong, and outputs the estimated traveling speed pattern.

5. The vehicle traveling speed pattern estimation device according to any one of claims 1 to 4, wherein

the traveling environment data include date, hour, day of the week, information on operation of on-vehicle equipments such as a wiper and a headlight, and sensing information obtained from on-vehicle sensors such as a raindrop sensor.

6. A vehicle traveling speed pattern estimation method comprising the steps of:

storing traveling data and traveling environment data as mutually associated data;

generating a candidate traveling speed pattern on the basis of the traveling data; and

extracting a candidate traveling speed pattern matching current traveling environment data and outputting an estimated traveling speed pattern for a route to be followed from now on.